### Remarks

The undersigned's Remarks are preceded by related comments of the Examiner, presented in small bold-faced type font.

### Claim Rejections - 35 USC § 103

Claims 1-55, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mosler et al (Hereinafter Mosler U.S Patent 6,304,858 in view of Frankel U.S Patent NO:6,070,151.

As per claim 1, Mosler discloses a method by which an entity manages an exposure to an economic risk associated with a commodity, comprising the steps of forming a model portfolio of said exposure, said model representing cash flows; forming a hedging portfolio for said exposure, said hedging portfolio representing cash flows, periodically combining said cash flows of said model portfolio and said hedging portfolio (see column 7 lines 23-51 and column 8 lines 59-65 and column 11 lines 18-31 and column 14 lines 5-21, lines 64-67 and column 15 lines 1-34, 58-65).

Mosler fails to explicitly teach providing a payout based on said combined cash flows.

However, Frankel discloses these and other objectives of the invention are met by providing a system for creating and managing securities that evaluates the cash flows of underlying securities collateralized by mortgage obligations (the "collateral") that are to be restructured into new securities. The underlying securities to be restructured can be either mortgage securities that quality as collateral for a CMO/REMIC or securities that were issued by an existing CMO/REMIC. The system determines the cash flows based on the Original Term of the underlying securities, as well as the Remaining Term and Loan Age, Gross Coupon, Net Coupon, Settlement Date, Issue Date, Payment Dates, Present Value, and various other mortgage loan characteristics. (see column 3 lines 41-53).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Mosler to include providing a payout based on said combined cash flows taught by Frankel in order to manage securities that are collateralized by mortgage obligations.

Applicants respectfully traverse the Examiner's rejection. As the MPEP recites:

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable

expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." (MPEP § 2142)

Applicant respectfully submits that the Examiner has not established a prima facie case of obviousness because (a) there is no motivation to modify or combine the reference teachings and (b) even if the references were combined, none of the prior art references, alone or in combination, describe or suggest all of the claimed limitations of the present invention.

## (a) There is no motivation to modify or combine the reference teachings:

### The MPEP states:

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the arts." In re Rouffet, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998). (MPEP § 2143.01)

None of these three possible sources have been demonstrated in the Office Action dated March 13, 2006. Neither Mosler nor Frankel provide a suggestion or motivation to combine each other. The only grounds offered by the Examiner for combining the cited references is "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Mosler to include providing a payout based on said combined cash flows taught by Frankel in order to manage securities that are collateralized by mortgage obligations." (present Office Action, page 3). A blanket statement concerning "one with ordinary skill in the art" is a highly subjective and unsubstantiated statement that does not meet the Examiner's obligation to succinctly establish a prima facie case of obviousness. The Federal Circuit has held that it is inappropriate to rely solely on 'common sense' or 'basic knowledge' in the art as the principal evidentiary basis for a rejection, without evidentiary support in the record. MPEP § 2144.03(B) (citing In re Zurko, 258 F.3d 1379, 1386 (Fed. Cir. 2002) ("holding that general conclusions concerning what is 'basic knowledge' or 'common sense' to one of ordinary skill

in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection.")).

Thus, Applicant respectfully submits that it would not have been obvious to combine Mosler – a system for trading interest rate swaps – with Frankel – a system for the creation and collateralization of real estate mortgage investment conduit securities. The undersigned respectfully submits that a conclusion of the "obviousness" should be supported by some objective evidence. However, the Examiner has provided no objective support for his conclusion.

Where the Examiner's combination requires that the cited references be modified to support the Examiner's claims of obviousness, the Examiner's burden is greater and there must be some objective reason to combine the teachings of the references. See MPEP § 2143.01.

A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993); see also In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000) (Court reversed obviousness rejection involving technologically simple concept because there was no finding as to the principle or specific understanding within the knowledge of a skilled artisan that would have motivated the skilled artisan to make the claimed invention); Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) (The level of skill in the art cannot be relied upon to provide the suggestion to combine references.).MPEP § 2143.01 (emphasis added).

The undersigned respectfully suggests that the Examiner has not demonstrated any of the three possible sources for a motivation to modify the Mosler reference with Frankel, whether in the nature of the problem to be solved, the teachings of the prior art, or the knowledge of persons of ordinary skill in the arts.

The undersigned submits that this appears to be a case in which the Examiner's conclusion of "obviousness" is merely based on an application of hindsight reasoning gained by the Examiner's review of the present application. Such hindsight reasoning is impermissible.

4

Application No. 09/863,148

Docket No. 6208-21

As the MPEP notes:

"The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight

must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from

the prior art." (MPEP § 2142); and

"When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:(...)

(C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention (...) Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143

n.5, 229 USPO 182, 187 n.5 (Fed. Cir. 1986)." (MPEP § 2141 II)

Thus, the Examiner's conclusion that it would have been obvious to one of ordinary skill in the

art is unsupported by the cited Mosler and Frankel references. In fact, the undersigned respectfully

suggests that the Examiner could not find such motivation because the cited references are not directed to

the subject matter of the claimed invention.

The undersigned respectfully requests that the Examiner either withdraw his rejection of the

claims or provide some objective evidence of a teaching found in the prior art to make the combination

made by the Examiner.

(b) Even if the references were combined, none of the prior art references, alone or in

combination, describe or suggest all of the claimed limitations of the present invention:

Even if Mosler and Frankel were combined, none of the references, alone or in combination,

describe or suggest all of the claimed limitations of at least the independent claims of the present

invention: claims 1, 24 and 39.

CLAIM 1

Claim 1 recites:

1. A method by which an entity manages an exposure to an economic risk associated with a

commodity, comprising the steps of:

5

NYA 797404.1

Application No. 09/863,148

Docket No. 6208-21

forming a model portfolio of said exposure, said model representing cash flows; forming a hedging portfolio for said exposure, said hedging portfolio representing cash

flows:

periodically combining said cash flows of said model portfolio and said hedging

portfolio; and

providing a payout based on said combined cash flows.

### b.1. Mosler:

With respect to Mosler, the Examiner states:

As per claim 1, Mosler discloses a method by which an entity manages an exposure to an economic risk associated with a commodity, comprising the steps of forming a model portfolio of said exposure, said model representing cash flows; forming a hedging portfolio for said exposure, said hedging portfolio representing cash flows, periodically combining said cash flows of said model portfolio and said hedging portfolio (see column 7 lines 23-51 and column 8 lines 59-65 and column 11 lines 18-31 and column 14 lines 5-21, lines 64-67 and column 15 lines 1-34, 58-65).

Applicant respectfully notes that Mosler does not disclose "A method by which an entity manages an exposure to an economic risk associated with a commodity, comprising the steps of: forming a model portfolio of said exposure, said model representing cash flows" (emphasis added). Mosler, discloses a method for trading and settling a contract having a price based on any preselected interest rate swap (IRS) curve (Mosler, col.1, lines 19-22). Mosler, limits its disclosure to this type of transaction, and does not teach or suggest, a method to manage an exposure to an economic risk associated with other types of commodities. Applicant respectfully brings to the attention of the Examiner that "commodity" is defined in Applicant's specification as "including, by way of non-limiting example, gas, oil, refined products, metals and financial instruments such as foreign exchange and interest rate futures contracts" (Applicant's disclosure, para. 0042). In accordance with this, Applicant's disclosure teaches, *inter alia* through various examples of non-financial commodities, how the variables involved in the production and marketing of these commodities are associated with financial risk, and how this financial risk can be modeled and hedged. There is no teaching or suggestion in Mosler about how to model exposure to an economic risk

6

Application No. 09/863,148

Docket No. 6208-21

associated with a "commodity", as such is defined in Applicant's disclosure, since Mosler's disclosure

concerns a very narrow field, with a single type of transaction.

In addition, Mosler does not teach or suggest either forming a model "portfolio" or forming a

hedging "portfolio" of an exposure to an economic risk associated with a commodity. Given that Mosler's

disclosure is uniquely concerned with IRS contracts, Mosler uniquely discloses pricing units that provide

the model price for the two series of cash flows involved in the IRS contracts (Mosler, col. 7, lines 23-

51), that is, the two series of payments between the two types of interests being swapped (i.e. two

variables between two parties, that is to say, one variable per party). Mosler does not therefore teach or

suggest how to form a model "portfolio" or a hedging "portfolio". As taught by Applicant, at least one,

but typically more variables are involved in the production and marketing of a commodity, and all of

these variables create the risk exposure that must be modeled and taken into account to be able to price

and hedge the production of the commodity, hence the reference to the model or hedging "portfolio".

For similar reasons, Mosler does not teach "forming a hedging portfolio for said exposure", since

Mosler is only concerned with "IRS contracts" and not "hedging" of the exposure of a commodity, which,

as disclosed in Applicant's specification can involve an unlimited number of hedging resources, including

forward sale and purchase of non-financial commodities (Applicant's disclosure, paras. 0005 and 0006).

For at least the foregoing reasons, and the Examiner's own acknowledgement that Mosler fails to

explicitly teach providing a payout based on said combined cash flows, Mosler cannot render Applicant's

invention obvious.

b.2. Frankel:

With respect to Frankel, the Examiner states:

Frankel discloses these and other objectives of the invention are met by providing a system for creating and managing securities that evaluates the cash flows of underlying securities collateralized by mortgage obligations (the "collateral") that are to be restructured into new

securities. The underlying securities to be restructured can be either mortgage securities that

7

NYA 797404.1

Amendment in Response to March 13, 2006 Office Action Application No. 09/863,148

Docket No. 6208-21

quality as collateral for a CMO/REMIC or securities that were issued by an existing CMO/REMIC. The system determines the cash flows based on the Original Term of the underlying securities, as well as the Remaining Term and Loan Age, Gross Coupon, Net Coupon, Settlement Date, Issue Date, Payment Dates, Present Value, and various other mortgage loan characteristics. (see column 3 lines 41-53).

Applicant respectfully submits that Frankel does not disclose or suggest at least the limitation "providing a payout based on said combined cash flows", as required by claim 1. Applicant respectfully draws the attention of the Examiner to the abstract of Applicants's disclosure:

"Liquidated cash flows, that are based on the modeled exposure and said hedge, are periodically calculated. If liquidated cash flows are positive, a payout is provided to the entity while a payout is received from the entity if the liquidated cash flows are negative." (lines 6-12)

As it is evident from such lines, depending on the outcome of the tracking portfolio, the payout may be <u>from</u> the third party or entity the client has hedged the risk with <u>to</u> the client, or it may be <u>from</u> the client <u>to</u> the third party or entity the client has hedged the risk with. As a simplified way of representing these cash flows, Applicant respectfully draws the Examiner's attention to Figure 1 of Applicant's disclosure. At the bottom part of the figure, the line between the Payout Manager and the Client account is <u>bidirectional</u>, graphically representing the bidirectionality of the cash flows in Applicant's invention.

Applicant respectfully submits that in Frankel, on the other hand, the payment flow is unidirectional. Applicant respectfully draws the Examiner's attention to Fig. 2 of Frankel's disclosure. The allocation of principal and interest, as taught by Frankel, stems from the principal and interest payments from the mortgage collateral. The cash flow is therefore always flowing unidirectionally, from from the mortgage collateral into the securities. In other words, no payments are ever made back to the owner/s of the mortgage/s.

Therefore, Frankel does not disclose at least the limitation of claim 1, "providing a payout based on said combined cash flows", as the result of the combined cash flows in Applicant's invention, may lead to payments in one direction or another.

8

#### The Examiner has stated:

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Mosler to include providing a payout based on said combined cash flows taught by Frankel in order to manage securities that are collateralized by mortgage obligations.

However, for the foregoing reasons, Frankel, in fact, teaches away from "providing a payout based on said combined cash flows", by only disclosing unidirectional payments. Therefore, Applicant respectfully submits that there would have been no motivation to combine, and it would not have been obvious to one of skill in the art at the time the invention was made to modify, the teachings of Mosler to include providing a payout based on said combined cash flows.

#### CLAIMS 24 and 39

#### Claim 24 recites:

- 24. A system by which an entity manages a portfolio of exposures to an economic risk associated with a commodity, comprising:
- a portfolio modeling engine, said portfolio modeling engine receiving said portfolio of exposures from said entity and forming a model portfolio representing cash flows;
- a hedging modeling engine for receiving at least one hedging transaction, said hedging modeling engine forming a hedging portfolio representing cash flows based on said at least one hedging transaction and said model portfolio;
- a tracking portfolio generator, said tracking portfolio generator receiving said model portfolio and said hedging portfolio and combining said cash flows of said model portfolio and said hedging portfolio; and
- a payout manager, said payout manager providing a payout based on said combined cash flows.

#### Claim 39 recites:

- 39. A system by which an entity manages a portfolio of exposures to an economic risk associated with a commodity, comprising:
- a transaction manager, said transaction manager executing at least one transaction between an institution and said entity, said at least one transaction forming a model portfolio representing cash flows;
- a hedging module for executing at least one hedging transaction, said at least one hedging transaction forming a hedging portfolio representing cash flows;
  - a tracking portfolio generator, said tracking portfolio generator receiving said model

Application No. 09/863,148

Docket No. 6208-21

portfolio and said hedging portfolio and combining said cash flows of said model portfolio and

said hedging portfolio; and

a payout manager, said payout manager providing a payout based on said combined cash

flows.

Claims 24 and 39 are drawn to systems that implement the method of the invention, and

contain at least the same limitation terms from Claim 1 that, as Applicant has argued above, are

not disclosed or suggested by Mosler in view of Frankel. Thus, for at least this reason, Applicant

respectfully submits that Mosler in view of Frankel cannot render Claims 24 or 39 obvious.

Claims 2-23, 25-38 and 40-55, depend directly or indirectly from claims 1, 24, or 39.

Since claims 1, 24 and 39 are not obvious under Mosler in view of Frankel, Applicant

respectfully submits that dependent claims Claims 2-23, 25-38 and 40-55 cannot be rendered

obvious under Mosler in view of Frankel either.

As recited by the MPEP:

what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed

"The initial burden is on the examiner to provide some suggestion of the desirability of doing

obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)." (MPEP §

2142)

Applicant respectfully submits that for the foregoing reasons, neither Mosler nor Frankel,

expressly or impliedly suggest the claimed invention. Applicant also respectfully submits that for the

foregoing reasons the Examiner has not presented a convincing line of reasoning as to why the artisan

10

NYA 797404.1

would have found the claimed invention to have been obvious in light of the teachings of the references.

Therefore, The Examiner's rejection is respectfully traversed.

# Closing

Claims 1-55 are now pending and believed to be in condition for allowance. Applicants respectfully request that all pending claims be allowed.

Please apply any credits or excess charges to our deposit account number 50-0521.

Respectfully submitted,

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8/14/2006

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